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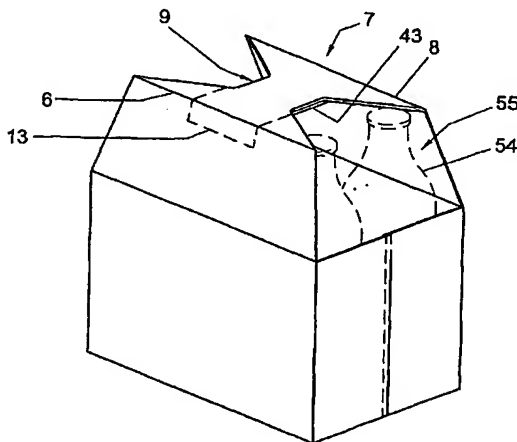
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(54) Title: MULTIPACK AND BLANK AND APPARATUS FOR THE MANUFACTURE THEREOF



(57) Abstract: A package for containers such as bottles or cans, folded from sheet material, comprising a bottom panel (2), a first and second side panel (4, 5) connected thereto via diametrically opposed first fold lines (3) and a first and second upper flap (7, 9) connected to the respective side panels via a second and third fold line (6, 8), respectively, wherein the first upper flap is located on the second upper flap and at least two openings (32) are provided in the first upper flap through which fingers can be inserted for lifting said package and the second upper flap extends at least between said openings, while, at the location of the second and third fold line over at least one part of the said second and third fold line at least two layers of sheet material are provided, on and/or on both sides of said second and third fold line such that an upper longitudinal edge (56) of at least one of the containers abuts, during use, against the innermost of said two layers of sheet material.

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*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/NL2004/000219

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 B65D71/36 B65D71/00 B65B11/10 B65B21/24

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B65D B65B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 148 654 A (KISTERS KARL) 22 September 1992 (1992-09-22) figure 3	26
X,P	WO 03/051717 A1 (BOIX MAQUINARIA, S.A; BOIX JAEN. JOSE) 26 June 2003 (2003-06-26) figures 1-7 & US 2004/031236 A1 (BOIX JAEN JOSE) 19 February 2004 (2004-02-19)	26
A	US 4 498 581 A (DUTCHER) 12 February 1985 (1985-02-12) the whole document	1, 19
A	WO 01/66434 A (RIVERWOOD) 13 September 2001 (2001-09-13) the whole document	1, 19

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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
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- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

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- \*G\* document member of the same patent family

Date of the actual completion of the international search

25 January 2005

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Name and mailing address of the ISA

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International Application No  
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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 996 883 A (BATES) 7 December 1999 (1999-12-07) column 2, line 46 - column 4, line 26; figures 1-6 -----	1,19
A	US 4 216 861 A (OLIFF) 12 August 1980 (1980-08-12) cited in the application the whole document -----	1,19

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/NL2004/000219

## Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

# INTERNATIONAL SEARCH REPORT

International Application No. PCT/NL2004 /000219

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-25

Package for containers with a reinforcement adjacent to the fold lines which connect the upper flaps to the side walls; blank for such a container  
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2. claims: 26,27

Apparatus for setting up packages where the blanks are not rotated during setting up.  
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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PC1/NL2004/000219

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5148654	A	22-09-1992	DE 4018140 C1 AT 85951 T CA 2043941 A1 DE 59100043 D1 EP 0460374 A1 ES 2038524 T3 JP 4242503 A	26-09-1991 15-03-1993 07-12-1991 01-04-1993 11-12-1991 16-07-1993 31-08-1992
WO 03051717	A1	26-06-2003	AU 2002358813 A1 BR 0207429 A CA 2433924 A1 EP 1468915 A1 US 2004031236 A1	30-06-2003 10-08-2004 26-06-2003 20-10-2004 19-02-2004
US 2004031236	A1	19-02-2004	AU 2002358813 A1 BR 0207429 A CA 2433924 A1 EP 1468915 A1 WO 03051717 A1	30-06-2003 10-08-2004 26-06-2003 20-10-2004 26-06-2003
US 4498581	A	12-02-1985	NONE	
WO 0166434	A	13-09-2001	AU 3578701 A BR 0109040 A CA 2399035 A1 EP 1263660 A1 WO 0166434 A1 JP 2003525826 T NZ 520428 A US 2003136820 A1	17-09-2001 03-06-2003 13-09-2001 11-12-2002 13-09-2001 02-09-2003 27-02-2004 24-07-2003
US 5996883	A	07-12-1999	AT 282557 T AU 729367 B2 AU 7957698 A CA 2293787 A1 DE 69827670 D1 EP 1049628 A1 NZ 501909 A WO 9856667 A1	15-12-2004 01-02-2001 30-12-1998 17-12-1998 23-12-2004 08-11-2000 31-05-2002 17-12-1998
US 4216861	A	12-08-1980	AT 20223 T AU 525588 B2 AU 4986579 A CA 1097284 A1 DE 2967602 D1 EP 0013479 A1 ES 252972 Y JP 1502688 C JP 55079244 A JP 63050263 B MX 150792 A ZA 7904657 A	15-06-1986 11-11-1982 12-06-1980 10-03-1981 10-07-1986 23-07-1980 16-05-1981 28-06-1989 14-06-1980 07-10-1988 19-07-1984 27-08-1980